

Abstract

A Doppler frequency is detected with a high degree of accuracy, deterioration of a transmission diversity effect is prevented, and a good reception property is secured. A reception demodulating unit of a portable communication apparatus according to the present invention has a path search and path selection unit for searching and selecting an optimum path, finger processing units for obtaining a phase variation component as a channel estimated value for each path and coherent-detecting by using its channel estimated value and a phase difference measuring unit for measuring a phase difference, a path timing difference measuring unit for measuring a periodical path timing difference, a frequency error detecting unit for detecting a frequency error of a signal by using a path timing difference and a phase difference, and a Doppler frequency detecting unit for detecting a Doppler frequency on the basis of a frequency error.